

MISSOURI. Conservationist

VOLUME 74, ISSUE 11, NOVEMBER 2013 • SERVING NATURE & YOU



[NOTE TO OUR READERS]

Fall for Missouri

The golden hues and crisp weather of autumn are a fantastic setting for your outdoor adventures. Summer's close brings new opportunities to fish and float quieter waterways, pursue game and great photos, and to

search for fall edibles and migrating birds.

Fall is a good time to reflect, take stock, and enjoy the fruits of our labors — and because of your wise investment in conservation, we all have more to be thankful for. Get afield with friends and family this season, and don't miss out on the many ways that conservation pays you back.

Need some inspiration? Look for resident and migratory birds throughout the state, and as close as your own back yard. See Page 10 to learn about common species and how to feed them, and be sure to visit our Birding page at mdc.mo.gov/node/235. Mark Goodwin offers a primer for aspiring deer hunters on Page 22, and Bill White shares his love of upland bird hunting with a good dog on Page 17.

There are many more options beyond these pages. Try your hand at hunting small game (mdc.mo.gov/node/3094) or waterfowl (mdc.mo.gov/node/303). Take a driving tour at Peck Ranch CA to see Missouri's first free-ranging elk in nearly 150 years (details at mdc.mo.gov/node/23935 or call 855-C-MDC-

ELK), hit a conservation trail (mdc.mo.gov/node/3392), or visit one of 1,000 Department of Conservation areas, including nature centers, fish hatcheries, natural areas, and shooting ranges (mdc.mo.gov/node/3116).

Don't miss out on Missouri's fall bounty, and don't forget your camera. Our current photo contest, Kids in Nature, wraps up November 15 (see Page 33), and we will announce our next contest in the January issue.



Robert L. Ziehmer, director



FEATURES

10 **Backyard Birds**

Set out a bird feeder to attract and enjoy Missouri's birds.

17 **A Long Walk Behind a Slow Dog**

by *Bill White*

Training and hunting with bird dogs builds responsibility, family bonds, and a deeper connection to our outdoor traditions.

22 **Deer Hunting: Getting Started**

by *Mark Goodwin*

A primer on how to hunt Missouri's white-tailed deer.

Cover: A white-tailed doe, by Noppadol Paothong. For a primer on how to hunt Missouri's deer, see Page 22.

📷 600mm lens + 1.4x teleconverter
f/5.6 • 1/125 sec • ISO 800

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WHAT IS IT?

Our photographers have been busy exploring the intricacies of the Missouri outdoors. See if you can guess this month's natural wonder. The answer is revealed on Page 7.



NOPPADOL PAOTHONG

WINGED WONDERS

I just read *Always Coming Home* in the August issue [Page 16]. I was impressed with everything our state does to help out our feathered friends! Thank you! I also liked the comment toward the end acknowledging that via the birds "We are all connected as distant neighbors." True.

Throughout autumn and winter I adore feeding these sweethearts. It's comforting to know that there are gifted professionals working behind the scenes to support their lives in so many ways.

Jen Baechle, via Internet

Every year a swift family would build a nest right by our back door. No matter how often we knocked down their work, they came back and raised a very messy family there. Until this year, that is.

In the spring, the piercing eyes of an owl on the cover of the *Conservationist* magazine gave me

an idea. I taped that cover and another owl photo from the story onto the storm door — right where the swifts built their nest. I watched as they swooped in, saw the owls and abruptly veered away. It's been all summer now and the birds have stayed away (they moved to the other side of the house where their mess falls into a flower bed). So thanks, *Conservationist*, for double duty as a great magazine and a great deterrent.

Professor Kit Jenkins, Webster University

FROM FACEBOOK

I would like to take my hunter safety course so that I can go out with my husband and my sons. They already have theirs. Which course do I sign up for?

Melissa Bridges-Bridgeman

Conservation Department: Here is a link to information on hunter education,

including our three options and where to find classes: mdc.mo.gov/node/3722.

I took my hunter education course years ago, and I can't find my card. How do I order a new one or renew?

Grant Venable

Conservation Department: Call our hunter education staff, they will be happy to assist you. You can reach them at 573-522-4115 ext. 3292 or ext. 3256.

Are there any good conservation areas in northern Missouri to bow hunt?

Russell Dinwiddie

Conservation Department: Pages 38–46 of our Fall Deer and Turkey Hunting Regulations and Information booklet have listings of conservation areas for hunting by region and method. Here is a link: mdc.mo.gov/sites/default/files/resources/2010/03/fdt2013.pdf

What kind of links or information do you have on coyotes in city limits? I know of one that has been moving around here by my house. What can I do to discourage it from hanging around?

Joel T. Self

Conservation Department: Coyotes are intelligent and opportunistic animals and will go where there is easy food and shelter. You can discourage them by not providing either. Keep garbage secured and do not leave pet food or other food out. They will prey on small dogs and cats. Here are links to more information: mdc.mo.gov/node/4615 and mdc.mo.gov/discover-nature/field-guide/coyote.

Is there a place I can take a fish I caught? I've never seen one like it, nor can I find any pictures of one.

Lee McLean

Conservation Department: Here is a link to help ID your fish: mdc.mo.gov/sites/default/files/resources/2010/04/introduction_fish_missouri-02-2011.pdf.



Reader Photo

FREQUENT FEEDER

Rob Prouty of Knob Noster, Mo., captured this image of a cardinal that frequents the feeders in his backyard. Prouty was a photographer in the Air Force for 22 years. Now, in retirement, Prouty says, "In our backyard we have four bird feeders usually filled with sunflower seeds and a camera with a long lens set up in a back bedroom that faces the backyard."



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Phone: 573-522-4115, ext. 3856 or 3249
Address: Circulation, PO Box 180, Jefferson City 65102-0180
E-mail: Subscriptions@mdc.mo.gov

Conservationist online services: Subscribe to the magazine, update your mailing address, or sign up to receive an e-mail when the latest issue is available online at mdc.mo.gov/node/9087

Cost of subscriptions: Free to Missouri households
Out of State \$7 per year
Out of Country \$10 per year

Please allow 6-8 weeks for delivery of your first issue.

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Flickr: flickr.com/groups/readerphotos
E-mail: Readerphoto@mdc.mo.gov
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Discover more about nature and the outdoors through these sites.

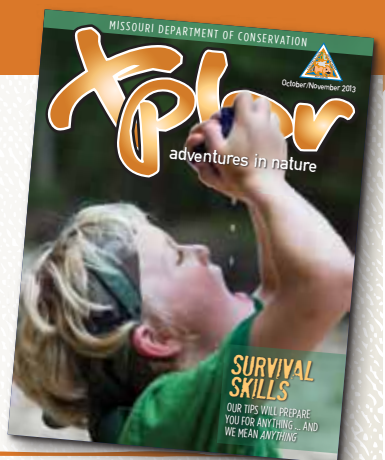
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KIDS' MAGAZINE

Six times a year we'll bring you eye-popping art, photos and stories about Missouri's coolest critters, niftiest natural places, liveliest outdoor activities and people who've made a living in the wild. Come outside with us and **XPLOR!**

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The Missouri Conservationist (ISSN 0026-6515) is the official monthly publication of the Missouri Department of Conservation, 2901 West Truman Boulevard, Jefferson City, MO (Mailing address: PO Box 180, Jefferson City, MO 65102.) Subscription free to adult Missouri residents; out of state \$7 per year; out of country \$10 per year. Notification of address change must include both old and new address (send mailing label with the subscriber number on it) with 60-day notice. Preferred periodical postage paid at Jefferson City, Mo., and at additional entry offices. Postmaster: Send correspondence to Circulation, PO Box 180, Jefferson City, MO 65102-0180. Phone: 573-522-4115, ext. 3856 or 3249. Copyright © 2013 by the Conservation Commission of the State of Missouri.

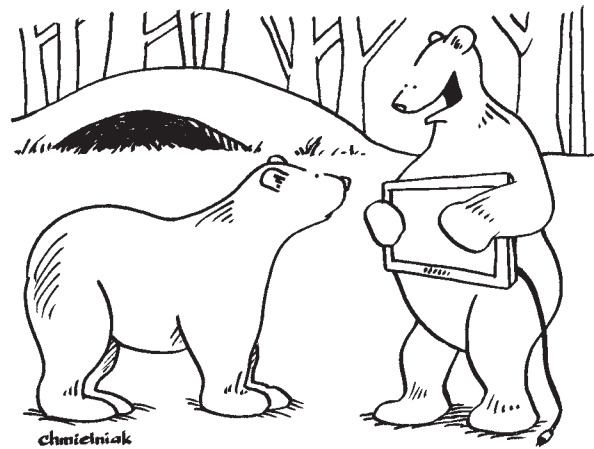
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HUNTING AND FISHING CALENDAR

| FISHING | OPEN | CLOSE |
|---|----------|----------|
| Black Bass from Ozark Streams | 05/25/13 | 02/28/14 |
| Nongame Fish Giggling | 09/15/13 | 01/31/14 |
| Paddlefish on the Mississippi River | 09/15/13 | 12/15/13 |
| HUNTING | OPEN | CLOSE |
| Coyote | 05/06/13 | 03/31/14 |
| Crow | 11/01/13 | 3/03/14 |
| Deer | | |
| Archery | 09/15/13 | 11/15/13 |
| Firearms | 11/27/13 | 01/15/14 |
| Early youth | 11/02/13 | 11/03/13 |
| November | 11/16/13 | 11/26/13 |
| Antlerless (open areas only) | 11/27/13 | 12/08/13 |
| Alternative Methods | 12/21/13 | 12/31/13 |
| Late Youth | 01/04/14 | 01/05/14 |
| Doves | 09/01/13 | 11/09/13 |
| Furbearers | 11/15/13 | 01/31/14 |
| Groundhog | 05/06/13 | 12/15/13 |
| Pheasant | | |
| North Zone | 11/01/13 | 01/15/14 |
| Southeast Zone | 12/01/13 | 12/12/13 |
| Quail | | |
| Regular | 11/01/13 | 01/15/14 |
| Rabbit | 10/01/13 | 02/15/14 |
| Sora and Virginia rails | 09/01/13 | 11/09/13 |
| Squirrel | 05/25/13 | 02/15/14 |
| Turkey | | |
| Archery | 09/15/13 | 11/15/13 |
| Firearms | 11/27/13 | 01/15/14 |
| Waterfowl | | |
| see the <i>Waterfowl Hunting Digest</i> or mdc.mo.gov/node/3830 | | |
| Wilson's (common) snipe | 09/01/13 | 12/16/13 |
| Woodcock | 10/15/13 | 11/28/13 |
| TRAPPING | OPEN | CLOSE |
| Beaver and Nutria | 11/15/13 | 03/31/14 |
| Furbearers | 11/15/13 | 01/31/14 |
| Otters and Muskrats | 11/15/13 | 02/20/14 |

For complete information about seasons, limits, methods, and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, *The Spring Turkey Hunting Regulations and Information*, *the Fall Deer and Turkey Hunting Regulations and Information*, *the Waterfowl Hunting Digest*, and *the Migratory Bird Hunting Digest*. For more information visit mdc.mo.gov/node/130 or permit vendors.



"Hibernate? And miss the perfect opportunity to binge watch Netflix and the Olympics?"

Agent Notes

Winter Trout Fishing



AS THE COLD weather sets in, many anglers will put up their tackle till spring. However, Missouri offers a variety of winter trout fishing opportunities — ranging from red, white, and blue ribbon streams and trout parks, to fishing ponds in Kansas City, St. Louis, and other communities across the state.

Whether you are a pro or new to trout fishing there are a few considerations to keep in mind. Each trout fishing area will have a unique set of regulations to help maintain quality fishing and ensure an equal opportunity for all anglers willing to brave the cold. Bait and tackle restrictions, along with "catch-and-release only" are some of the regulations that can differ depending on the area you are fishing.

If an area allows you to harvest your catch, you must purchase a trout permit in addition to a fishing permit. This applies to all anglers, regardless of age, that plan to keep trout. However, anglers who have purchased a lifetime conservation partner permit or a resident lifetime fishing permit do not need to purchase an additional trout permit, but may be required to obtain a daily permit at certain areas. Regardless of permit type, all anglers should check local regulations for the area they are going to fish to ensure compliance with all regulations.

Bundle up and bring the whole family to your local winter trout area. One catch of this beautiful fish and you'll be hooked on winter trout fishing in Missouri. To learn more about trout fishing in Missouri, visit mdc.mo.gov/node/5603, or contact your regional conservation office (see Page 3).

Daniel Schepis is the conservation agent in Clay County. If you would like to contact the agent for your county, phone your regional conservation office listed on Page 3.

ASK
THE

Ombudsman



Springtails

Q. During warm days this fall, we have noticed that masses of tiny, grayish-black insects gather on our patio and bare patches of soil. Can you identify them from the photo and tell us if they are hazardous to us or our property?

Your photo is of insects called springtails, of which there are hundreds of species in North America. Only a millimeter or two in length, a tail-like structure on their abdomen allows them to spring up to several inches at a bound, a distance of about 100 times their body length. They live in moist soil, mulch, or leaf litter, feeding on organic matter, which they help break down to release nutrients into the soil. More hunters often find these tiny insects in the hollow stems of their collected mushrooms. They sometimes get into damp areas of homes or are brought inside with potted plants. They are not harmful to people, pets, or homes and will be gone if moisture sources are eliminated. Springtails are an indicator of healthy, moist, organically rich soil. Occasionally springtails will mass as you observed, usually only for a few days. A water hose will disperse them, if that is desired.

Q. We had an abundance of thistles in our fields this past summer. Does feeding birds thistle seed lead to additional weedy thistle plants on the landscape?

No. We have a number of thistle species in Missouri, including native species and several introduced weeds from Europe and Asia. The plant (*Guizotia abyssinica*) that provides the “thistle” seed for bird feeding (also called niger, nyger, or nyjer seed) is not actually a thistle. It is a plant native to Africa that resembles some of our native sunflower species. The application of the name “thistle” to the seed was probably for marketing purposes, to make it seem like a natural food for finches, several species of which have a preference for thistle seeds. Niger has only once been documented as growing in the wild in Missouri, in disturbed soil

along a railroad right-of-way. Niger seed imported into the U.S. as birdseed must be heat treated to kill any potential weed seeds contained in the shipment, so most niger seed will not germinate.

Q. We had an unfamiliar bird show up in our fenced yard recently. It doesn't seem interested in leaving. Can you identify it from the photo?

Your bird is an American coot, a bird of wetlands that somewhat resembles a duck but is more closely related to sandhill cranes and rails. It is commonly observed on reservoirs, lakes, ponds, rivers, swamps, and marshes, but it occasionally shows up in high and dry suburban landscapes. They will land away from water in storms or when they are fooled by wet pavement that can resemble a body of water when viewed from the air. Coots need a running start and some distance to get airborne. When they find themselves surrounded by fences, they often don't have a sufficient length of runway for take-off. If you can shoo your bird into a more open area, it will probably take off and head for water.



American coot

Ombudsman Tim Smith will respond to your questions, suggestions, or complaints concerning the Conservation Department.
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Email: Ombudsman@mdc.mo.gov



Eastern cottontail

Missouri's Small-Game Hunting Forecast

Hunters wondering about prospects for quail, rabbits, squirrels, and other small game in Missouri will find many answers in the past two years' weather.

The fortunes of wild animals always depend heavily on weather. But what's good for one game animal doesn't always favor others.

Squirrels and quail offer a good example of the contrasting effects of weather.

Bobwhite quail build their nests on the ground. Immediately after hatching, bobwhite chicks are barely larger than bumblebees, and their downy plumage is not waterproof. This makes them extremely vulnerable to death by

hypothermia. Consequently, quail nesting success falters when cool, wet weather lingers into summer. Drought doesn't exactly help quail, but they are much better adapted to hot, dry conditions than to wet and cold.

In contrast, gray and fox squirrels generally rear their young in hollow trees, where they are protected from the elements. By the time they emerge from den trees six or seven weeks after birth, they are half grown and well equipped with insulating fur. Damp summers don't bother them much. However, they depend heavily on acorns and other nuts for food. In years when acorns are scarce — as they were across much of southern Missouri in 2012 because of drought — squirrels go hungry. That means fewer squirrels survive the following winter. And because squirrels go into the next breeding season in poor physical condition, they tend to raise only one litter of young instead of two. So the effects of a bad nut crop are felt for at least two years.

That scenario is exactly what is unfolding this year.

"The effects always are more severe in southern Missouri," says Lonnie Hansen, a resource scientist for the Missouri Department of Conservation. "That is because acorns and other nuts make up so much of the food base for squirrels and other wildlife in heavily forested areas. A poor nut crop is less detrimental in northern Missouri, where row crops like corn and soybeans help create a more diverse and stable diet."

Nevertheless, Hansen says his and others' observations indicate that squirrel numbers are down in northern Missouri, too.

"I think there has been somewhat of a crash, especially in the Ozarks," he says, "but they will come back."

Resource Scientist Beth Emmerich says the news for quail is better. In spite of a couple of major snow events, the winter of 2012–2013 was fairly mild, allowing good carry-over of bobwhites for the 2013 nesting season. A late spring meant quail got a late start, with the peak hatch occurring in July. However, the warm, dry conditions that prevailed after that were ideal for bobwhite nesting.

"The record rainfall of 2008 made things extremely hard for nesting quail," says Emmerich. "2009 and 2010 also were cooler and wetter than

normal, continuing the trend of bad news for quail and quail hunters. But the summers of 2011 and 2012 were dry and warm, and quail made some gains."

Reports from the field lead Emmerich to believe another warm, dry summer allowed quail to build on recent years' success.

Rabbit population changes tend to mirror those of quail because their habitat needs are similar. Larger size and fur make cottontails slightly less vulnerable to weather, so their population swings are less dramatic. But warm, dry weather favors rabbit reproduction, so rabbit hunters get good news this year, too.

Emmerich says lack of suitable habitat continues to be the biggest obstacle to increasing quail and rabbit populations.

"Good brood-rearing habitat is most limiting statewide," she says. "Quail chicks need bare ground to be able to forage effectively, with weedy plant species providing food as well as overhead protective cover."

Trappers and furbearer hunters have a bright outlook this fall. Resource Scientist Jeff Beringer says populations of all commercial furbearing species in Missouri are stable or slightly increasing.

According to Beringer, favorable weather and strong fur prices resulted in high participation by hunters and trappers during the 2012–2013 season. The Conservation Department sold more than 9,000 trapping permits, which was a 25-year high. Last year's bobcat harvest was an all-time record, with 5,059 harvested. The otter harvest was the second-largest on record, and the coyote harvest was the largest in 25 years.

Raccoons bucked the trend, with a 12-percent decrease in the combined trapping and hunting harvest from 2011–2012 to the 2012–2013 season. The decline was in line with archery hunter observations, which showed a 35-percent decline in raccoon sightings. Beringer attributes the decrease to deaths of young raccoons during last year's drought.



The 2012–2013 coyote harvest was the largest in 25 years.

Meanwhile, last year's red and gray fox harvests increased by 18 and 41 percent, respectively. Beringer said this probably occurred because the value of bobcat pelts was high last year.

"A lot of foxes are taken incidentally by trappers targeting bobcats and coyotes," says Beringer. "We



WHAT IS IT?

Snowy Owl

Nyctea scandiaca

Missourians are most likely to see snowy owls in the state's northern counties from mid-November through February. They nest in the open Arctic tundra. Peak numbers in Missouri occur about every four years in response to lemming population crashes in the far north. Snowy owls in Missouri are mostly immature individuals forced south for lack of food. Younger owls have extensive black barring on their body and head. Adults, especially males, are very white with some barring. Adults are 20–25 inches long (tip of bill to tip of tail) and have a wingspan of 4½ to 5 feet. Snowy owls are active during the day and prefer open grasslands where they perch on the ground, fence posts, and hay bales. —photo by Noppadol Paothong

(continued from Page 7)

have seen a long-term decline in both red and gray fox numbers, probably due to competition [for resources] with coyotes and bobcats." Distemper might have played a part in this decline, too. However, archer observations and sign-station surveys suggested increases for both fox species from 2011 to 2012.

Recent survey data indicate that more than 13,000 hunters pursued raccoons in Missouri last year and more than 25,000 hunted coyotes last year. Beringer says he expects the trend toward greater participation in furbearer trapping and hunting to continue.

Permit requirements, season dates, bag limits,

and other details of trapping and small-game hunting seasons are found in the *2013 Summary of Missouri Hunting & Trapping Regulations*. This booklet is available wherever hunting permits are sold, at Conservation Department offices and nature centers, or online at mdc.mo.gov/node/11416.

Botanical Classic Updated

Conservation professionals and amateur naturalists who take their botanizing seriously are rejoicing over the publication of the third and final volume of the revised Steyermark's *Flora of Missouri*. Julian Steyermark's monumental work

encompassing more than 3,000 plants has been a priceless tool for conservation professionals and nature enthusiasts since its first publication in 1963. Over time, however, changes in plant diversity and distribution have left gaps in the book's coverage. The Conservation Department and the Missouri Botanical Garden collaborated on a second edition to update Steyermark's seminal work. Botanical Garden Curator George Yatskievych is overseeing the project, with the first volume published in 1999 and the second in 2006. With the publication of Volume 3, Missouri now has a fully updated compendium of the state's plants. Steyermark's *Flora of Missouri* is available from the Missouri Botanical Garden Press, www.mbgpress.info, 877-271-1930.

Four Trees Named State Champs

The past few months have been active ones for Missouri's State-Champion Tree Program, with four new champions certified.

A tree in St. Louis' Forest Park is the new state-champion cucumber tree, *Magnolia acuminata*. It stands 76 feet tall and has a spread of 81 feet and a trunk circumference of 11 feet, 10 inches. This species' common name comes from its cucumber-shaped seed pods. Although it is related to the flowering magnolia, its flowers are not showy.

Another new champion, a shingle oak (*Quercus imbricaria*), lives in St. Louis' Bellefontaine Cemetery. It measures 109 feet tall, has a spread of 95 feet and a trunk circumference of 14 feet, 6 inches. Bellefontaine Cemetery also is home to Missouri's state-champion American elm.

A black maple (*Acer nigrum*) growing in Cooper County has been declared a co-champion for its species. It stands 52 feet tall and has a spread of 67 feet and a trunk circumference of 8 feet, 10 inches. The other champion black maple is in Boone County, on land owned by the University of Missouri.

A tree growing at the Eastwind Community in Ozark County is the new champion black gum tree (*Nyssa sylvatica*). The tree stands 92 feet tall, has a circumference of 104 inches, and a spread of 34 feet. It replaced the old champion black gum, a 109-foot tree on Caney Mountain Conservation Area that was claimed by strong wind in 2012.

Could you have a champion tree in your area? To find out how big a tree must be to qualify, and to learn how to enter a tree in the program, visit mdc.mo.gov/node/4831.



The new state-champion cucumber tree in St. Louis' Forest Park

Patton Man is Logger of the Year

Dustin Lindgren of Patton is Missouri's 2013 Logger of the Year.

Resource Forester Marty Calvert nominated Lindgren for the state award. He says Lindgren understands a clean logging job is a direct reflection on himself and his company.

"Dustin knows the importance of forest products utilization and is supportive of timber stand improvement practices," says Calvert. "Some of the things we look for include good working relationships with landowners and foresters, minimal damage to remaining trees and resources, and prevention of soil erosion. Other important factors include the aesthetics of a site after harvesting is completed, safe work performance and use of equipment, utilization of harvested trees, the desire to address wildlife management concerns, and use of proper forest-management techniques."

Lindgren advanced to the statewide competition after winning the Southeast Region title.

According to Calvert, the Logger of the Year Award Program is intended to recognize and encourage loggers throughout the state who do outstanding jobs of practicing low-impact, high-efficiency logging.

To be eligible for the award, loggers must have completed the Professional Timber Harvester's Training Program sponsored by the Missouri Forest Products Association and the Conservation Department.

As state winners, Lindgren and his crew received signed prints acknowledging their accom-

DID YOU KNOW?

Conservation works to sustain healthy wildlife populations.

Black Bear Research Project

» **A statewide black bear population estimation project** was completed by Department staff last year.

» **An overall population estimate of 252 bears in Missouri** resulted from the research project.

» **61 different bears** were captured 101 times — 36 males and 25 females.

» **53 bears were fitted with radio collars.**

» **Captured male bears weighed 42 to 485 pounds**, while females weighed 70 to 220 pounds.

» **Male home ranges averaged 127 square miles** and female home ranges averaged a much smaller 40 square miles.

» **Female bears denned in mid-November** and males in early December. Males left dens in early March and females left in late March.

» **Black bear distribution in southern Missouri** appears patchy and restricted to areas of continuous forest such as the Mark Twain National Forest.

» **To learn more about black bears**, including viewing a video and listening to audio of black bears, visit mdc.mo.gov/node/973.



Dustin Lindgren, left, is Missouri's 2013 Logger of the Year. Travis Chisum, right, is a member of Lindgren's crew.

plishment from the Conservation Department. They also received a new MS 441 C-M Stihl Magnum chainsaw and safety gear from Crader Distributing Company of Marble Hill.

For more information on forest management in Missouri, visit mdc.mo.gov/node/3352.

Conservation Pioneer Libby Schwartz Passes

Conservation pioneer Elizabeth "Libby" Schwartz died surrounded by her family in The Dalles, Ore., in September. She earned a PhD in zoology from the University of Missouri-Columbia, where she also taught. It was in one of her classes that she met her future husband, Charles "Charlie" Schwartz. That was the beginning of a love affair/professional collaboration that spanned five decades and took them and their children to Alaska, Hawaii, Puerto Rico, Mexico, and Africa studying, photographing, and filming a dizzying array of wildlife. In Missouri, they conducted groundbreaking research on prairie chickens and box turtles. Their book *The Wild Mammals of Missouri* remains the definitive text on that subject and a gold standard for meticulously researched, intimately detailed, and lovingly illustrated wildlife guide books. Their films won international acclaim. They were frequent contributors to the *Conservationist* and produced two dozen nature films for the Conservation Department. These

productions routinely won national and international awards. Libby's insatiable intellectual curiosity led her to take college courses well into her 80s. She was born on Friday, Sept. 13, 1912, and died on Friday, Sept. 13, 2013.

Conservation Department Named 4-H "Bridge Builder"

The Missouri Department of Conservation was honored with the Missouri 4-H Foundation's Nelson Trickey Bridge Builder award Sept. 20 in Columbia. The Conservation Department has been a dedicated Missouri 4-H partner for more than 50 years.

"We value the strong, long-standing partnership between 4-H and the Department of Conservation, and are honored to receive the Nelson Trickey Bridge Builder award," said Conservation Department Outreach and Education Division Chief Michael R. Huffman. "The focus of 4-H on youth and families is helping develop future generations of Missouri leaders. The partnership between the Department and 4-H is helping develop the next generation of citizen conservationists."

The Conservation Department's work with Missouri youth began in 1939 with "Missouri Nature Knights," an education initiative that promoted activities to restore wildlife habitat. In 1958 the Department began leading 4-H programs covering youth hunter safety, wildlife education, water facts, fishing, and boating safety.

Missouri 4-H honored the Conservation Department with the Friend of 4-H award in 1977 for contributions to outdoor education and safety development. The Department's support continues today in all 4-H outdoor education and natural resource programs.

"The Missouri Department of Conservation is committed to the continued growth of Missouri 4-H programs," said Missouri 4-H Foundation executive director Cheryl Reams. "We are very grateful for this extraordinary partnership that makes possible so many opportunities for Missouri's young people, and the Conservation Department is very deserving of this honor."

The Missouri 4-H Foundation's Nelson Trickey Bridge Builder Award is presented to individuals or organizations for exceptional service bridging youth and community.

Backyard *Birds*

Set out a bird feeder to attract and enjoy Missouri's birds.

Missouri is a great state for birds. Of the approximately 900 species in North America, more than 400 have been recorded in Missouri, and more than 150 species regularly nest in our state. Maintaining a birdfeeder in your yard is an entertaining and relatively easy way to get to know some of them.

Birds certainly benefit from easy access to food in feeders, but keep in mind that they would do just fine without it. The real beneficiaries of backyard bird feeding are people; birds at feeders are beautiful to watch, often amusing, and companionable. To keep birds returning to your feeders in any season, you need to provide them with three essential elements:

- » A variety of good-quality seed
- » Fresh water for drinking and bathing
- » Plenty of places to take cover — preferably native trees and shrubs. Native plants also provide potential nesting sites and sources of natural food.

Two million Missourians enjoy observing, feeding, and photographing wildlife near their homes. Backyard birding is a fun and easy way to enjoy the outdoors all year.





Black-capped chickadee

NOPPADOL PAOTHONG PHOTO

What is the Best Season to Feed Birds?

While winter is the most popular time to stock feeders, many people enjoy feeding birds year-round. That's because different species visit feeders during different seasons. For example, some birds are only summer residents in Missouri, others are here only in the winter months. Behavior also changes with the seasons. In the spring and summer, many young birds follow their parents to the feeder. It is fascinating to watch the adults show their young how to crack open seeds.

Cardinals and blue jays will feed either on the ground or on a platform.

People often say that once you start feeding birds, it's better for them if you remain diligent and continue to feed them routinely. In fact, no research indicates that during normal weather, birds will starve if feeding is stopped for a time. Remember, birds are highly mobile and



Your bird feeding station may be as simple or as complex as you like. Place your feeders where you can see them from a favorite vantage point.

resourceful. They often visit many feeding stations in a neighborhood, and if yours runs out, they will seek food elsewhere.



What Should My Feeding Station Look Like?

Your bird feeding station may be as simple or as elaborate as you like. You may choose to simply scatter seeds on the ground, build your own platform, or hang several store-bought feeders of various shapes and sizes throughout your yard. Remember that there are differences in feeding habits among birds. Songbirds, such as the dark-eyed junco or white-crowned sparrow, prefer to feed directly on the ground. Cardinals and blue jays will feed either on the ground or on a platform. Goldfinch and chickadees also will visit small, plastic feeders that are fixed to the outside of a window by a suction cup. Because feeding birds is primarily for your own pleasure, place your feeders where you can see them from a favorite, inside vantage point.

What Are the Best Types of Foods?

A report by the U.S. Fish and Wildlife Service — based on almost 750,000 observations of birds choosing between two or more seed types at specially constructed feeding stations — shows that those species that prefer large seeds are highly attracted to sunflower seed. The most favored is the smaller, black-oil sunflower seed and not the more familiar striped varieties. The study included several seed types, but three

Common Winter Birds

Here are just a few of the birds you might spot at your feeders this winter.

Downy Woodpecker

The tiny, black-and-white backed woodpecker. Common year-round in forests and wooded neighborhoods. Especially attracted to suet feeders and sunflowers. Males have small red patches on the backs of their heads.



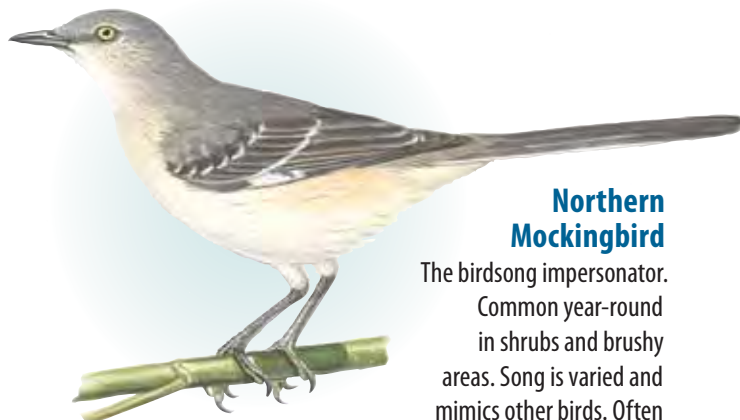
Dark-eyed Junco

The busy “snowbird” on the ground under your feeder. Common in shrubs and brushy areas in winter; spends the summer in Canada and northern United States. They flock to feeders in groups and are sometimes the most frequent feeder visitors.



Eastern Bluebird

Missouri's state bird. The bright blue bird with a reddish chest is seen year-round, but is less common in winter. Find them in grasslands with scattered trees, open areas, and backyards in rural areas. They will often nest in boxes mounted on fence posts.



Northern Mockingbird

The birdsong impersonator. Common year-round in shrubs and brushy areas. Song is varied and mimics other birds. Often seen walking along the ground opening and closing its wings.



White-breasted Nuthatch

The upside-down bird. Common year-round in woodlands, parks, and suburban areas. Forages for insects, seeds, and berries. Often walks upside down on tree trunks and branches.

American Goldfinch

In summer, the canary-yellow bird with black wings. Found year-round in grasslands and suburban areas. They stick together in flocks and have a noticeable undulating — or dipping — flight pattern. Their yellow color fades to olive in winter.



Common Winter Birds

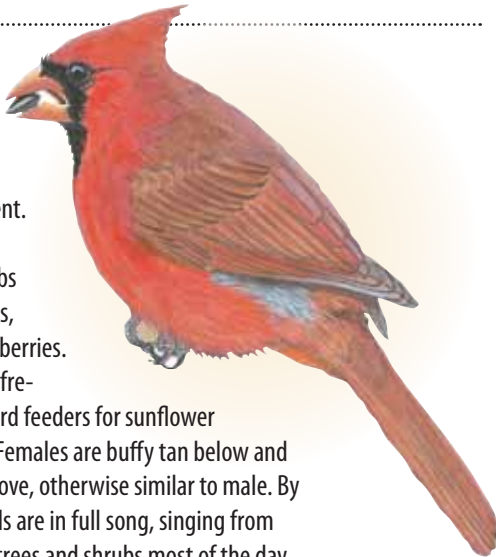


Black-capped Chickadee / Carolina Chickadee

The common feeder birds that call *chickadee-dee-dee*. Common year-round in forests, woodlands, and neighborhoods with plenty of large trees. The black-capped is found in northern Missouri and the Carolina in southern Missouri. Similar in appearance, the black-capped has more white on its wing in winter and its call is slower. Both are frequent visitors to feeders and easily approached.

Northern Cardinal

A common permanent resident. It forages on the ground or in shrubs for insects, spiders, seeds, fruits, and berries. The "redbird" is a frequent visitor to bird feeders for sunflower and other seeds. Females are buffy tan below and grayish brown above, otherwise similar to male. By February, cardinals are in full song, singing from the tops of small trees and shrubs most of the day.

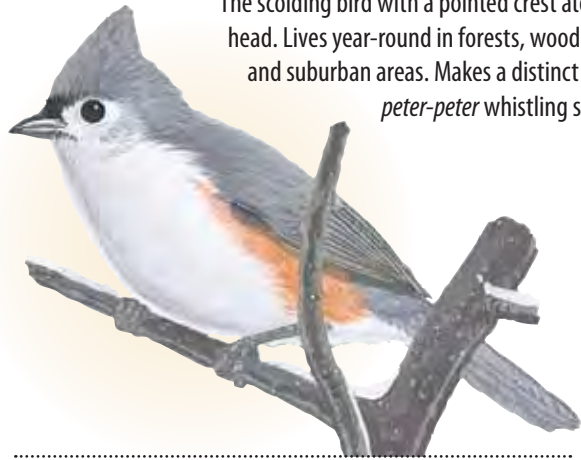


Mourning Dove

The cooing lovebird. Found in grasslands, towns, and suburbs. Common year-round, though especially abundant in spring and summer, less so in fall, and rare in winter. Shaped somewhat like rock pigeons, though slimmer.

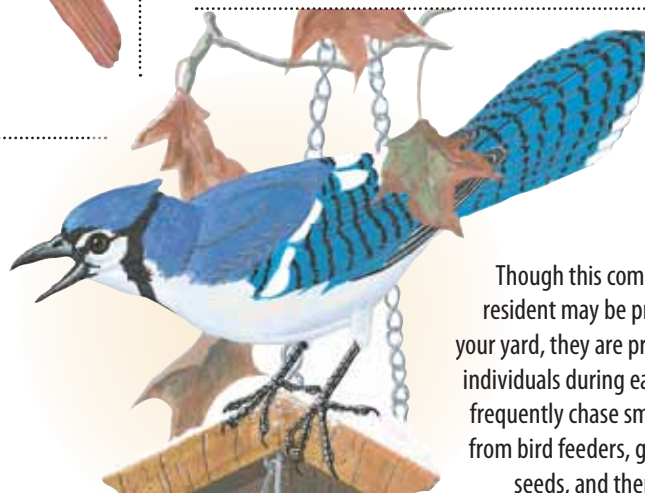
Tufted Titmouse

The scolding bird with a pointed crest atop its head. Lives year-round in forests, woodlands, and suburban areas. Makes a distinct *peter-peter-peter* whistling sound.



Song Sparrow

Missouri's permanent-resident sparrow. Common year-round in weedy fields, brushy floodplains, and at bird feeders in most of Missouri, except rare in the Ozarks. Missouri has 19 different species of sparrow, and they are one of the more difficult groups of birds to identify.



Blue Jay

Though this common permanent resident may be present all year in your yard, they are probably different individuals during each season. They frequently chase smaller birds away from bird feeders, gather up several seeds, and then fly off to cache them in a tree or in the ground.

Blue jays are frequently noisy and easily detected in tree canopies. They often form groups and chase and mob hawks and owls they encounter.

stand out as being the best foods for attracting the most species of birds:

» **Black-oil sunflower seeds** attract the widest variety of birds that eat seeds. It can be purchased at reasonable prices in bulk, usually 25- to 50-pound bags. It's best to avoid buying small bags of colorful, mixed seeds. They often contain common cereal grains such as milo, wheat, oats, and rice that few birds will eat.

» **White millet**, also available in bulk, is appealing to doves, sparrows, juncos, and other birds that feed on the ground. It works well to scatter it on the ground underneath a feeder that is stocked with black-oil sunflower seed. Cracked corn is also inexpensive and recommended for spreading around on the ground for doves and sparrows. Squirrels eat corn, too, and it may help somewhat in keeping them out of your feeders.

» **Niger "thistle"** is a small seed that usually goes into cylindrical feeders equipped with several perches and small holes from which the birds extract seeds. American goldfinches and purple finches, especially, are attracted to niger. It is more expensive than black-oil sunflower seeds, but fewer species eat it; consequently, it lasts somewhat longer.

In addition to seeds, birds also eat suet, fruit, and nectar. Suet, which is made from animal fat, is sold in small blocks and fits into specially designed wire cages that can hang from a limb or post. In summer, suet will sometimes spoil in the heat if it goes uneaten for a long period of time. If this happens, throw it out and start over with a fresh block, and try to hang it in a shady spot. Peanut butter is a good substitute for suet in the summer. Mix one part peanut butter with five parts corn meal and stuff the mixture into holes drilled in a hanging log or into the crevices of a large pinecone. This all-season mixture — as well as suet — attracts woodpeckers, chickadees, titmice, and, occasionally, warblers.

Some birds such as waxwings, bluebirds, and mockingbirds eat fruit and rarely birdseed. To attract these birds, soak raisins and currants in water overnight, and then place them on a



Black-oil sunflower seeds



White millet



Niger "thistle"

Ruby-throated hummingbird



table feeder. To attract orioles and tanagers, cut oranges in half and skewer them onto a spike and place them near other feeders.

Ruby-throated hummingbirds are attracted to nectar feeders. Hummingbird feeders are fairly inexpensive, and it is easy to make the sugar-water "nectar" yourself. Simply make a sugar solution of one part white sugar to four parts water. There is no need to add red food coloring. Feeders must be washed every few days with very hot water and kept scrupulously clean to prevent the growth of bacteria. Change the nectar at least weekly, or more often if it becomes cloudy.

Hummingbird feeders are fairly inexpensive, and you can make the sugar-water "nectar" yourself by mixing one part white sugar to four parts water.

You might want to entice birds to your yard using native trees, shrubs, vines, and flowers. They not only produce food for birds, they provide cover as well.



Cedar waxwing

Never use artificial sweeteners in feeders. Honey-water is sometimes wrongly recommended because it has a higher nutrient content than sugar-water. There are great dangers in using honey, however, because if the solution is not boiled and the feeder not cleaned each time before filling, a fungus that will attack the bird's tongue can grow in the mix. In Missouri, hummingbirds typically visit feeders April 25 to the end of September, with the spring and fall seasons being the busiest.

What About Water and Landscaping?

To increase the popularity of your feeding station, furnish water — preferably year-round. The Carolina wren and the bluebird, Missouri's state bird, may be enticed to feeding stations during the winter if water is available. During

prolonged periods of ice or snow cover, provide grit (coarse sand or ground shells) along with the seed. Birds lack teeth, and the grit that they keep in their gizzards is used to grind up seeds.

Besides furnishing the most attractive seed and a clean water supply, you may entice birds to your yard in other ways. Native trees, shrubs, vines, and flowers not only produce food for birds, they also provide cover. Many decorative trees and shrubs produce fruits and berries for birds. Holly, hawthorn, and persimmon, for example, are favorites of cedar waxwings.

In new housing developments, trees and shrubs that birds use for nesting, perching, and escaping predators are often in short supply. Birds need places to perch overnight and vantage points from which they not only can approach your feeder, but from where they also can watch for potential predators. ▲



To learn more about birding in Missouri:

» Visit mdc.mo.gov/node/235.

» Purchase *Birds In Missouri*. It is the definitive guide to birds in our state by Brad Jacobs. It is a 400-page, full-color book with 354 illustrations of Missouri's birds, including resident, migrant, breeding, and winter resident species. It is written in a conversational style suitable for both novice and experienced bird enthusiasts, and it also includes range maps and seasonal abundance graphs. Seventeen two-page habitat scenes portray Missouri's diverse natural and urban landscapes. Published by the Conservation Department, it is available at conservation nature centers, bookstores statewide, or at mdcnatureshop.com.

A LONG WALK

Training and hunting with bird dogs builds responsibility, family bonds, and a deeper connection to our outdoor traditions.

by **BILL WHITE**

photographs by **NOPPADOL PAOTHONG**



BEHIND A SLOW DOG



When I was a boy, almost everyone had a bird dog. On weekends during November and December, it was common to see a pickup with a dog box and to hear gunfire from the fields.

Today, with plummeting game bird populations caused by habitat loss and weather extremes, it is not so common. It is even less common to find a young person who has trained his or her own dog to hunt upland birds.

One of the greatest joys of bird hunting for me is to watch the dogs work. There are times when I may not go home with a bird in hand, but I have a smile on my face and dog-pointing memories to carry me through the years. My kids often wonder why I didn't take an opportunity to shoot, and my answer is always, "I was watching the dog!" (Maybe I am getting slow, too?)

Taking a long walk behind a dog that is slow enough for me to watch is what it is all about. Some breeds of bird dogs will range far and wide during a hunt, lock up on point, and wait for you to arrive for the flush. For my taste, a



Chief, a Deutsch drahthaar, holds a point in training for the hunt.

dog breed that works closer is a lot more fun to hunt behind. Especially when the birds are flushing wild, a close-working dog will not send them out of shooting range. And the extra steps I need to follow close-ranging dogs surely must be good for me.



Tony White's Hungarian vizsla, Jake. With some advice and encouragement from hunters and dog trainers, Tony trained Jake to be a wonderful hunting companion.

I also prefer a bird dog with a lot of pointing style, like my German wire-haired pointer, Heidi. When she goes on point the front of her body is tilted down and she almost always raises a front paw. And when she catches scent of a bird off to her side or behind her, she locks up on point with her nose nearly touching her tail. Heidi is not the perfect bird dog, which is the fault of her trainer and not her. However, some of her best hunting performances will be forever etched in my mind.

BOYS AND THEIR DOGS

My grandfather and uncle taught me to hunt when I was in high school. Following in their footsteps, I have tried to pass the hunting heritage on to my kids, and I hope they share it with my grandkids, too.

Those early hunts with my kids paid off, and now they continue to hunt as young adults. Two of my four boys enjoyed the sport of quail hunting enough to make the commitment to get a dog and train it. I think watching Heidi hunt was a big part of their inspiration to join the bird dog world.

Almost four years ago, a family friend found my youngest son, Tony, a Hungarian vizsla in need of adoption. This breed of dog is very people-oriented, so it is a pet as well as a hunting companion. They were originally bred to be hunting and companion dogs for Hungarian royalty. (And Tony definitely treats his vizsla like he is royalty!)



The vizsla pup was named Jake, and Tony trained him from start to finish, with some advice and encouragement from other hunters and dog trainers. Tony has captured pigeons and raised quail to aide in that training. In shop class he built a dog box for his pickup. The same friend who found Tony his vizsla found a 2-year-old Deutsch drahthaar in need of adoption for my son Andrew. Drahthaars

and German wire-hairs are said to be the same breed, but the Drahthaar line has passed rigorous field-testing and trials. The breed was developed in the early 1900s in Germany by crossing a number of hunting breeds. Andrew's dog, Chief, already had some training, but had not hunted birds, so he needed some "finish" training before taking him on a hunt for wild birds. Again, Andrew had help from dog trainers willing to give of their time to help a young person get his first dog off to a good start.

MEMORABLE MOMENTS IN THE FIELD

Our first pheasant hunting trip in the fall of 2012 with the new dogs was memorable. We were proud of the way they performed.

Still dark that morning, we pulled up to the field. As we put on our hunting vests, the field in front of us erupted with the sounds of at least two quail coveys calling and numerous roosters crowing. It was one of those goose bump kind of moments for a bird hunter.

As shooting time arrived and we stepped into the field, all the work at dog training began to pay off. Within 10 minutes, we had birds on point. Andrew was nervous that Chief would not hold a point or just run amok in the field, scaring birds and ruining the hunt. His concerns were ill-founded. Chief acted like he knew what he was doing and amazed his new owner, as well as the owner's father. Chief is not afraid to get in the brush, he holds a point, quarters, and retrieves just like the book says he should. Chief must have read the book, too.

Tony had concerns about Jake, too. In previous years, Jake hunted with older, experienced dogs, and it seemed to intimidate him. The longer we hunted, the more he hung back during the hunt and would finally end up following Tony instead of looking for birds. We hoped that another year of maturity and confidence would change that for Jake.

We flushed a rooster along the edge of a native grass field and Tony shot it as it flew over a harvested bean field. When that bird hit the ground, it hit on a dead run. Vizslas are known as good runners, and Jake illustrated that ability as he took off across the field. It took him only a matter of seconds to cross 40 or 50 yards to catch that bird. Then he brought it back to Tony with rave reviews from all



watching. He impressed us further when he retrieved a long-distance bird from the tall grass on the first try. We couldn't see it, but Jake knew where to go.

THE QUAIL HUNT OF A LIFETIME

Both Andrew and Tony experienced quail hunts of a lifetime in early 2013 as a snowstorm closed in on us in northwest Missouri. The private land we hunted on was managed with fire, edge feathering, and food plots — a dream-scape for quail. The boys had their dogs and I had my 18-month-old German shorthair, Trapper, along for the hunt. In two hours, we never seemed to run out of birds. Then the snowstorm got so bad we had trouble seeing well enough



to shoot. While we were chasing singles from one covey, another covey would get up, and this continued until we had to leave the field. At one point, all three dogs were pointing different birds and Tony saw other birds running around in the grass between the dogs and us.

Tony and Andrew decided it was the best quail hunt ever, and it is definitely one of my top five hunts of all time. To top it off, on the way back, we had to stop for a covey of quail crossing the road in the middle of the snowstorm.

A hunt of this magnitude is still possible in an era of declining quail habitat and cataclysmic weather events. It was the perfect scenario for some new dogs needing to get into a lot of birds. All it takes is a little effort with a match, a

chainsaw, and a little herbicide.

With help from good friends, giving dog trainers, and a patient father, the boys and their first bird dogs are off to a great start. A bird dog takes an investment of time in training, and few young people have undertaken the responsibility. I hope my boys have many more long walks behind slow dogs to share with each other and pass it on like their father and his grandfather did.

You can learn more about hunting for game birds at mdc.mo.gov/node/3798. For upland game bird regulations, visit mdc.mo.gov/node/3615. ▲

Bill White is the Department of Conservation's private land services division chief.

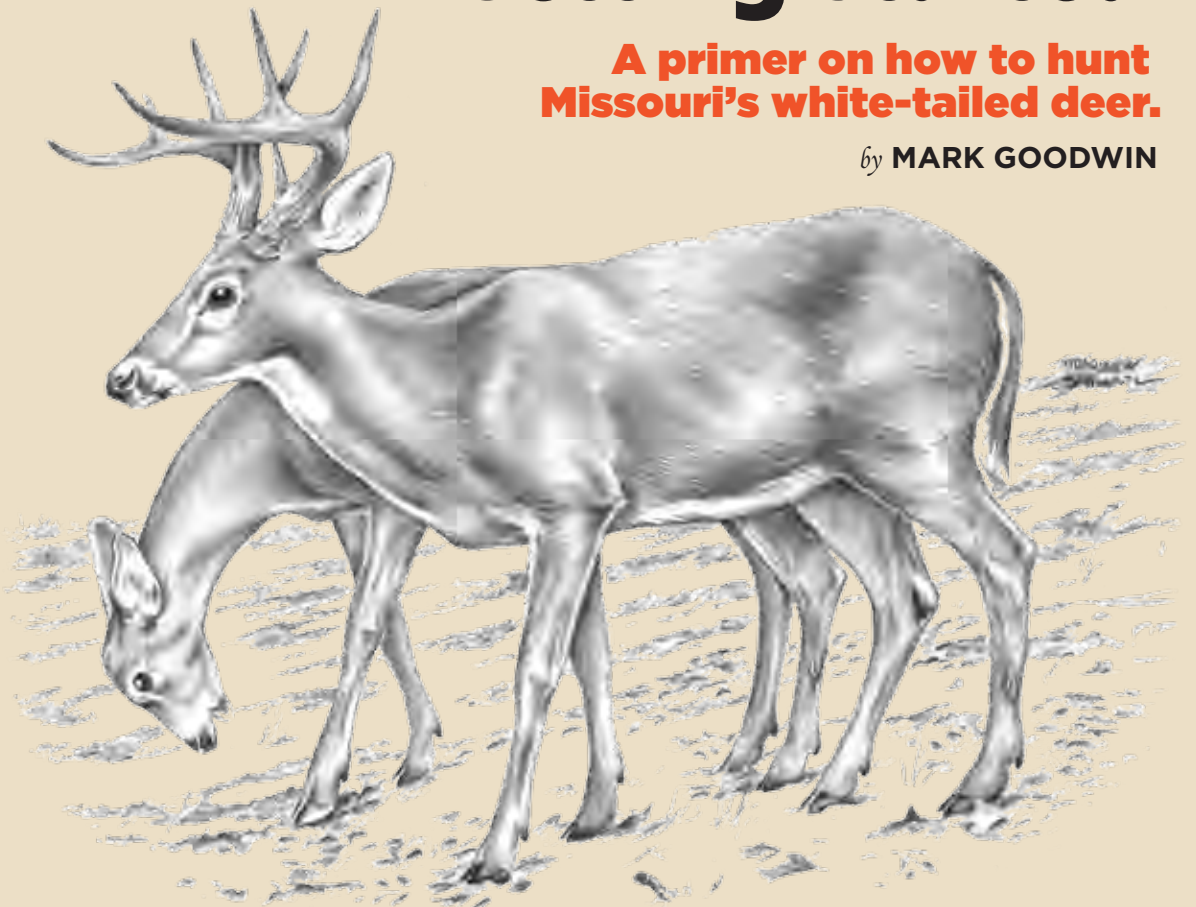
The author, left, his sons Tony and Andrew, and their hunting dogs (from left) Trapper, Jake, and Chief.



DEER HUNTING: Getting Started

**A primer on how to hunt
Missouri's white-tailed deer.**

by MARK GOODWIN



THIS FACT IS HARD TO IMAGINE: BY 1925, UNREGULATED HUNTING AND changes in habitat had reduced Missouri's white-tailed deer population to an estimated 395 animals statewide. At the time, many wildlife managers thought whitetails were likely on their way to elimination from the state. Proper conservation, however, prevented this tragedy.

Today, Missouri's white-tailed deer population is estimated at more than 1 million animals — more than existed in the area before settlement by Europeans.

Hunting opportunities for white-tailed deer in the Show-Me State have never been better. If you want to give it a try, here's how.

PHOTO BY DAVID STONNER;
ILLUSTRATION BY CHARLES SCHWARTZ

A Little Natural History

It pays to know the life history and habits of the animals you hunt. Here's a quick rundown on whitetails.

In Missouri, most white-tailed deer are born in late May and early June after a gestation period of six and a half to seven months. Twins are most common. At birth, white-tailed fawns have their eyes open and can stand and walk, though feebly. For three to four weeks they tend to remain hidden in cover while their mother stays close by. After this time, fawns travel with their mother and begin the process of weaning. Three to five months after birth, fawns begin the process of molting and growing their winter coat, which results in losing their white spots.



As bucks age, their antlers grow larger and heavier. White-tailed bucks tend to be in their physical prime between 2½ and 7½ years of age. Past that, antler size decreases.

The most obvious difference between male and female white-tailed deer is that most males have antlers. Under the influence of hormones, antlers grow and are shed every year. Bucks shed their antlers in late winter or early spring and immediately begin growing a new set, a process that takes five to six months.

Fawn bucks typically have “buttons” that by fall can be seen as slight swellings under the skin. By 1½ years of age, almost all bucks have antlers that are visible externally. Depending on a number of factors, including diet and heredity, antlers during a buck’s second winter may be unbranched “spikes” or multi-pointed. As bucks age, their antlers grow larger and heavier. White-tailed bucks tend to be in their physical prime between 2½ and 7½ years of age. Past that, due to old age, antler size decreases.

The daily routine of white-tailed deer varies with the season and weather, but generally follows a pattern of movement from feeding to bedding areas early and late in the day. Much deer activity occurs at night. Mature bucks are often almost entirely nocturnal, except when does are in heat during the fall rut or breeding season.

Gear

Missouri offers a variety of deer-hunting seasons. Check and make sure to buy clothing that complies with hunter-orange regulations.

Missouri also allows you to hunt deer by way of a variety of methods. Regardless of method, purchase quality equipment. If you decide to hunt with a bow, get a good one. All bows require implements that reduce the sound of the string when you release an arrow. Compound bows also have cables, which make noise when the bow is drawn and shot. Without quieting implements, deer hear bow noise and bolt — hunters call it jumping the string. Cheap bows tend to make more noise and are more difficult to quiet.

If you decide to hunt with a rifle, again, buy a quality one. You need an accurate rifle with a good trigger. As far as caliber, pick one that is readily available at most places that sell hunting supplies. Know that some bullets for some calibers are quite expensive — more than \$2 a shell. The 30-06 is a favorite of many deer hunters, because it is moderately priced and versatile.

Most deer hunters like their rifles equipped with a telescopic sight. Scopes make sighting for a shot far easier. They also gather light, which makes for better shot placement under the low-light conditions of early morning and late evening. Scopes are available for a wide range of prices. Avoid the cheaper ones. You can buy a good scope and mounts for \$200-\$300.

Tree stands, such as ladder stands and climbing stands, offer three big benefits: They can place you above the line

Gear

Missouri offers a variety of deer-hunting seasons as well as methods. Purchase quality equipment to make the most of out your hunt.



Hunter orange Check and make sure to buy clothing that complies with hunter-orange regulations.

Rifle Pick a caliber that is readily available at most places that sell hunting supplies.



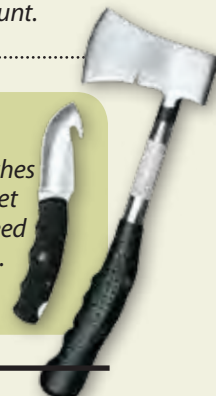
Telescopic sight
Scopes gather light, making better shot placement under low-light conditions possible.

Bow Make sure to purchase a quieting implement to avoid jumping the string.



Tree stand Buy one that meets TMA standards and use the fall-arrest system throughout the hunt.

Knife and hatchet
Knife blade length of 4 to 5 inches long is all you need. A hatchet comes in handy when you need to cut through pelvic bone.



of sight of deer, so deer are far less likely to see you; they help keep your scent off the ground; and they often give you a wider field of view.

The big problem with tree stands is that they can be dangerous. Every year hunters are seriously injured—sometimes fatally—by falling out of tree stands. Most hunters fall when they are climbing in or out of their stands.

If you decide to hunt out of tree stands, don't hunt out of homemade ones. They are prone to fail. Buy one that meets the standards of the Treestand Manufacturer's Association (TMA), and buy and use a fall-arrest system that meets TMA standards. Use the system the moment you leave the ground, throughout the hunt, and when you descend to the ground. Once in your stand, you will also need a haul line to raise and lower your gear including unloaded firearms, bows, and arrows. Safety, when hunting out of a tree stand, cannot be overstressed.

Walk into any store that sells deer-hunting gear, and you will face an array of scents and calls designed to attract deer. While they do work, it's important to remember that these products will never replace proper stand placement, woodsmanship, and patience.

If you kill a deer, you need a quality knife to remove the internal organs. The knife should be stout and made of steel that will hold an edge. Both fixed bladed or models with a locking blade work well. Blade length of 4 to 5 inches long is all you need. Longer blades just get in the way. Rubber gloves to keep blood off your hands is a good idea. A small hatchet also comes in handy to cut through the pelvic bone.

Find Your Hunting Spot

Having a great place to hunt is the most important key to consistent deer-hunting success. What makes a great deer-hunting spot? Two things: a healthy deer population and limited hunting pressure. White-tailed deer, if pressured by hunters, change their habits and become very difficult to hunt. Many of the best deer-hunting spots are privately owned by landowners who limit hunting. The very best spots are those where you are the only deer hunter allowed. How can you connect with such a hunting area?

If money is no issue, you can buy one. For most deer hunters, however, this is not an option. The easiest way to gain access to a prime deer-hunting spot is if you have friends or relatives who have land that supports a healthy deer population. They know you and will more likely give permission. Asking landowners you don't know for permission to hunt deer is tougher, particularly if they are landowners who limit deer hunting. It helps if you have a friend who knows a landowner. The friend, then, can

Help Us Stop CWD

Practice proper carcass disposal

Deer hunters play an important role in preventing the spread of chronic wasting disease (CWD). The disease can spread through carcasses of diseased deer, which can remain infectious for years. Carcass parts known to concentrate CWD include brain, spinal cord, eyes, spleen, and lymph nodes. Moving harvested deer that still have these parts can spread CWD to other areas.

Hunters who harvest deer in the Containment Zone (Chariton, Randolph, Macon, Linn, Sullivan, and Adair counties) should not take whole deer carcasses out of the Zone, or carcass parts that contain brain, spinal cord, eyes, spleen, or lymph nodes. Items that are safe to transport are:

- Meat that is cut and wrapped,
- Meat that has been boned out,
- Quarters or other portions of meat with no part of the spine or head attached,
- Hides or capes from which all excess tissue has been removed,
- Antlers, including antlers attached to skull plates or skulls cleaned of all muscle and brain tissue, and
- Finished taxidermy products.

Deer hunters throughout the state should properly dispose of carcasses from harvested deer to prevent the spread of infectious diseases, such as CWD.

- Remove meat in the field and leave the carcass behind. Bury the carcass if possible.
- If processing harvested deer in camp or at home, place carcass parts in trash bags and properly dispose of them through a trash service or landfill.
- Take harvested deer to a licensed commercial processor to ensure proper carcass disposal.
- For taxidermy work, use a licensed taxidermist to ensure proper carcass disposal.

Learn more at mdc.mo.gov/node/16478

serve as a character reference. Sometimes, it's best to first ask permission to squirrel hunt. If you receive permission, then, over time, the landowner has an opportunity to know you, which may result in your receiving permission to deer hunt. Any way it goes, when seeking permission to deer hunt on private ground, expect to get turned down a fair bit before you get a "yes."

When you receive permission to hunt a great deer-hunting spot, treat the permission for what it is, something precious. Tell few, if any, people about the spot. Before you do anything, such as putting up stands or cutting shooting lanes, check with the landowner to make



sure it's ok. Find ways to thank the landowner for hunting permission, such as helping with chores. There's always work to be done on a farm, much of which requires two sets of hands.

If you are unable to secure a place on private land, don't despair. There are lots of great public lands available for hunting as well. Find a list, as well as information on urban and managed hunts, and all things deer-hunting related, on the Department's Deer Hunting page at mdc.mo.gov/node/2458.

Hunting Strategy

Among deer hunters there occurs a small subset, highly skilled (and a little lucky), who tag deer every year. If you had the opportunity to ask them for hunting advice, here's what they would say.

Stand Placement

In preparation for the hunt, do everything you can to prevent deer from ever knowing of your presence. Scout and prepare stands well ahead of deer season. Right after

Place stands between feeding and bedding areas, preferably where several trails come together because of a terrain feature, such as a bluff or a body of water, which confines deer travel.

deer season is the perfect time to prepare for next season. Deer will still be on their fall/winter patterns. If the area doesn't change, these patterns won't change either. And if you spook deer, they have a year to forget about it. A productive time to scout is when snow has been on the ground for several days, leaving tracks easy to spot.

Place stands between feeding and bedding areas, preferably where several trails come together because of a terrain feature, such as a bluff or a body of water, which confines deer travel.

Movement and Scent

A deer's vision is very sharp at picking up movement. If you sit still, however, you can fool a deer. Not so with a deer's nose. One whiff of human scent, and deer either

bolt or slip away undetected. A deer's sense of smell is its main defense, and that's what you must strive to overcome.

Establish several stands, which will allow you to keep the wind in your favor. If possible, place stands on high points, where wind currents are more predictable. Winds tend to swirl in draws and creek bottoms. Plan approaches to your stand that minimize the chance of spooking deer. And no matter how heavily deer are using a spot, don't hunt it if the wind is not in your favor.

There are deer-hunting products on the market that claim to mask human scent. They may reduce human scent, but they don't mask it. The only way to beat a deer's nose is to position yourself downwind from where you think deer will approach.

Pace and Patience

If you plan to bowhunt, don't make the mistake of hunting hard at the beginning of the season and burning yourself out. Your best chances of seeing deer are at the peak of the breeding season or rut, which is usually the first 10 days in November. Serious bowhunters often take vacation time this week and hunt every day up until rifle season. When a doe comes into standing heat, she does so for just 24 hours, but for several days before and after this receptivity, she is releasing pheromones that spur bucks into attempts at breeding. Since the does aren't willing to breed, a lot of chasing goes on.

The peak of the rut is the time to stay on the stand from first light until dark, for deer can be up and moving at any



time. If you don't have patience for long sits, develop the patience. Bring food, water, books — whatever it takes to keep you on stand. Patience is a skill. The best deer hunters have it.

Become an Expert Shot

Practice with your bow or rifle until you are an expert shot. Being an expert typically takes lots of practice. Work at it. If you are a bowhunter, and plan to hunt from an elevated stand, make sure you practice shooting from one. From elevated stands, you must bend at the waist to prevent shooting higher than your point of aim. When a deer approaches you want to make the most of the situation.

The only shot to take on a deer with bow and arrow is the heart/lung area. With a rifle, the same area is a good choice. Though it wastes a little meat, a shot through both shoulders is also good because it hits the heart/lung area and drops a deer in its tracks.

Cleaning and Cooking Deer

When it all comes together and you tag a deer, you face a little work. Your first task is to remove the deer's internal organs. This is easily accomplished. Under the excitement of the moment, however, it can be easy to cut yourself. Be



The best chances of seeing deer are at the peak of rut, which is usually the first 10 days in November.



Being an expert shot takes a lot of practice. The best shot to take on a deer with a rifle is the heart/lung area.

careful. It also helps to have someone with you who is skilled at cleaning, skinning, and butchering a deer the first time you do it.

With the deer on its back, and using just the tip of a sharp knife, cut a small hole in the skin and muscle tissue found in the center of the abdominal cavity. Place two fingers in the hole to push back the internal organs, and continue to cut forward toward the chest. If you plan to have a head and shoulder mount of your deer, you stop cutting when you reach the sternum or breastbone. If not, continue cutting up to the neck. It may take two hands and some force, but a stout, sharp knife will cut through the breastbone.

To finish opening the body cavity, cut down to between the hind legs. A small hatchet helps split the pelvis. The urinary bladder lies under the pelvis. If it is full, be careful at this point not to puncture it. With the body cavity opened, roll the deer on its side and pull out all the internal organs. To remove the large intestines, make a final cut around the anus.

In the Kitchen

Learning to turn wild game into fine cuisine is a joy in itself. Check the Internet for recipes. With practice, you will develop an eye for the good ones. Here's a venison stew recipe that's easy and delicious:

- 2 pounds venison stew meat, cubed
- 1 can condensed tomato soup
- 3 medium carrots, sliced
- ½ can water
- 1 teaspoon salt
- 3 potatoes, peeled and quartered
- 1 cup each of frozen peas and corn
- ½ teaspoon pepper
- 1 bay leaf
- ¼ cup dry red wine

Preheat oven to 275 degrees. Put all ingredients into a large pot with an oven-safe lid. There is no need to brown the meat first. Mix ingredients together. Cover tightly and bake in the preheated oven for 5 hours. Serves 6.

With this chore done, many hunters take their deer to a meat locker to have the deer skinned and processed. You can do this work yourself. If you can skin and quarter a squirrel, you can do the same with a deer. Deer are just bigger.

To skin a deer, cut a hole behind and tie ropes around the large tendons found at a deer's ankles. Use the ropes to hang the deer at a convenient height, then skin the deer starting at the hindquarters.

With the hide removed, cut the front shoulders off of the body, saw the feet off, and put the shoulders in a cooler with ice. To remove the back straps, make a long cut, right next to both sides of the backbone, from where the hindquarters meet the backbone to where the neck starts, then fillet out the meat. Inside the body cavity, close to the lower back, are two tenderloins. Cut these out, and then separate the hindquarters from the backbone, saw off the feet, place the hindquarters in a cooler, and the work is done.

With fresh ice, the meat will keep for several days in the cooler. The chore that remains is deboning the meat and placing it in individual bags with water for freezing, or wrapping in butcher paper. In deboning a deer, it is important to remove as much connective tissue and fat as possible, for both impart an unpleasant taste to the meat. Allowing the meat to soak in water for a couple days, and changing the water twice a day to remove blood from the meat, also improves meat flavor. ▲

Mark Goodwin is a retired teacher, avid outdoorsman, and freelance writer from Jackson, Mo.

Great Blue Heron

Both its status as North America's largest heron and its prowess as an angler and hunter earn this bird its name.

THE GREAT BLUE heron (*Ardea Herodias*) approached from a distance, descending almost imperceptibly as I watched it from my hide at the edge of our tiny pond. I assumed its destination was the Bourbuese River, a quarter mile behind me, but as it banked toward my location, I smiled at the prospect of the magnificent bird, North America's largest heron, landing at my feet. I folded myself deeper into the camouflage of my makeshift blind and strained my eyes upward to see the action without revealing my face.

It closed with the wind to its rear so I knew the landing would be tricky. Its long, trailing legs brushed the crown of a willow tree as it negotiated a 180-degree turn into the wind right over my position. On reflex, I dropped my head under the huge bird's shadow. When I slowly looked up, the nearly 5-foot-tall heron stood 20 feet away, glaring in my direction. I wasn't surprised it had made me, camouflage and all. Great blue herons are among the cagiest birds I've ever photographed.

As wildlife often does, the great blue heron evokes memories from my childhood. Our family had just rented a house in the country in Pulaski County and it wasn't long before I discovered a pond nearby. You can imagine my surprise as a boy of 8 or 9 when I scrambled over the pond's dam to find a giant, blue bird lifting off. It immediately reminded me of the "Pterodactyl" from our dinosaur studies at school. I couldn't wait to get a better look at my fascinating discovery but my experience was repeated the next afternoon as the heron somehow sensed my approach and took flight again before I topped the dam. I finally lost interest after a week or two, but I still think of prehistoric birds every time I see a great blue heron in flight.

Great blue herons are found statewide in Missouri as they nest in colonies near large rivers, lakes, and wetlands. They are most commonly sighted during spring migration and after dispersal from nests in fall but I often see them along the Missouri River and at other locations in summer and winter, as well. Great blue herons will eat about anything they can swallow, including fish, amphibians, reptiles, small mammals, insects, and even other birds. They simply grab smaller prey but as you can see from the featured photo, taken at Columbia Bottom Conservation Area, they sometimes impale larger prey with their sword-like bills.

Great blue herons are extremely light and powerful in flight. The individual in the photo actually flew toward me from several hundred yards away with its catch, a large carp, dangling helplessly from its bill. I captured the image right before a second great blue heron dropped from the sky and purloined the scaly trophy from the successful hunter. Both magnificent and dramatic, great blue herons are a wildlife watcher's dream.

—Story and photos by Danny Brown

 500mm lens + 1.4 teleconverter • f/5.6 • 1/200 sec • ISO 200

*We help people discover nature through our online field guide.
Visit mdc.mo.gov/node/73 to learn more about Missouri's plants and animals.*





Young Conservation Area

Vast forests hold a wealth of nature- and wildlife-viewing opportunities at this diverse, expertly managed area in the St. Louis region.

COUNTLESS OUTDOOR ADVENTURES wait inside the forests of Young Conservation Area (CA) in Jefferson County. Of the area's 1,145 acres, about 93 percent are forested with oak, hickory, and other species native to the region.

Bountiful sandstone and limestone forests, woodlands, and glades provide plenty of habitat for wildlife, but Young CA's diversity goes beyond upland communities to include one of the highest quality streams in the state. LaBarque Creek, a permanent stream that flows through the area's northern portion, supports a diverse aquatic ecosystem that features more than 50 documented species of fish. The creek, along with riparian tree plantings, open fields, and restored woodlands and glades, demonstrates how healthy watersheds provide diverse wildlife habitat.

Due to this diversity, Young CA is a great destination for nature and wildlife viewing. Deer, turkeys, and squirrels are abundant, as are spring wildflowers and native birds. Bird watching is especially good for forest interior and riparian species.

LaBarque Creek and two additional lakes offer fishing opportunities for bass and sunfish. Hunting options include deer, rabbit, turkey, and squirrel during the appropriate seasons.

The beauty and diversity of Young CA is perhaps best viewed on foot; visitors can do this from one of two hiking trails. The 2.5-mile Taconic Loop Trail and 3.5-mile LaBarque Hills Trail travel past some of the area's most stunning natural features including its various forests, glades, and streams, as well as projects such as restoration of riparian trees that protect LaBarque Creek from



17–40mm lens • f/11 • 1/20 sec • ISO 800

soil erosion and upland forest-improvement sites that have been thinned and prescribed burned to improve forest health and diversity as well as benefit wildlife.

Area managers use other wildlife-management techniques including controlling invasive species, managing for native vegetation in the fields, edge feathering, and building brush piles, all of which provide habitat for animals. Fish-habitat improvement at Young CA involves watershed conservation, protecting stream banks, and planting trees along the stream corridor of LaBarque Creek. Further explanations of these improvement efforts can be found on educational signs located along trails.

To reach Young CA, go south on Highway 109 off Interstate 44, then drive about 1.5 miles and turn right on Route FF. For more information about Young CA including an area map and brochure, visit the website listed below.

—Rebecca Martin, photo by Noppadol Paothong



Recreation opportunities: Bird watching, fishing, hiking, hunting in season, management demonstrations, nature viewing, trapping with special-use permit

Unique features: This area features more than 1,000 acres of forest and woodlands, as well as abundant wildlife-viewing opportunities and management demonstrations.

For More Information Call 636-458-2236 or visit mdc.mo.gov/a8605.

Kids in Nature



Simple Ideas
for Family Fun

Put up a
birdfeeder.
Read more
about how
on Page 10.



Listen for the last
cricket calls of
the season.

Collect **nuts** and see how
many kinds you can find.

Look for **mallards**.



Walk through your
neighborhood and
see how many
coniferous
trees you
can spot (a
tree that
doesn't
shed
leaves).



Eastern redcedar

Take a walk
and try to see
how many old
bird nests you
can spot.



After a hard frost,
hunt for "**frost flowers**."

Kids in Nature Photo Contest!

Break out those cameras and send us your best images of you and your family enjoying the outdoors for our new photo contest. Once again, we will be accepting entries via the online photo sharing service, Flickr. If you are not a member of Flickr, it is easy and free to join. Once you are a member, just navigate to our kids in nature group page: www.flickr.com/groups/mdc-kids-in-nature and submit your photos. MDC staff will select a winner every month and display it on our website. All of the monthly winners will appear in the January 2014 issue of the magazine.



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I Am Conservation

Kelsey Brandkamp, of Columbia, Mo., started hunting at a young age. "I was 8 when I shot my first turkey and deer," says Brandkamp, "and it just stuck with me ever since." Brandkamp says most of her family hunts or enjoys the outdoors in some way, and she has hunted in Missouri and many other places. "So far I've hunted for deer, bear, turkey, pheasants, quail, waterfowl, hogs, javelin, furbearers, and other small game," says Brandkamp. She also enjoys fishing, trapping, and just being outside. "I like to take my dogs swimming out at Rocky Fork during the summer, and we bow fish a lot at Eagle Bluffs," says Brandkamp. "The outdoors is a huge part of my life, so I want to help keep those resources around for future generations." Brandkamp is currently studying Fisheries and Wildlife at the University of Missouri–Columbia. "I take conservation and management very seriously," says Brandkamp. "I just think it's important we look at what we're doing now and, instead of saying: 'How will this effect me and my hunting opportunities?' we should be asking ourselves: 'How will this effect my children's and grandchildren's hunting opportunities?'" —*photo by David Stonner*